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EXAMINER

MAGLO, EMMANUEL K

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,240	Applicant(s) WU, HAIJUN	
	Examiner EMMANUEL MAGLO	Art Unit 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1, 2, 3, 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Yokoyama (US 2002/0086705 A1).

Regarding claims 1, 6, Yokoyama describes *a method for transferring user position identifier, which is applicable for a broadband network composed of broadband access server (BAS) device layer, convergence layer and broadband access device layer, the method comprising the steps of:*

a. setting a tag for each broadband access device, (fig. 1), and for each non-cascading access port in the broadband access device, respectively, (note in each of the base station #1 and the base station #2, the switch (representing the access server) is also provided with a non cascading device “CPE 1 associated with V-Tag 1, CPE 2 associated with V-Tag 2);

b. deciding whether the port receiving message in the broadband access device is a cascading port, if so, directly transferring the message received on the port; (table T1 and table T2 associated respectively with the switches decide the Ethernet message transfer to the corresponding port, [0038]-[0041], otherwise, inserting said tag set in step a into the message

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transmitted through this port in a fixed encapsulation format and transferring this message;

[0043]: “ The BSEs of the base stations #1 and #2 are provided with communications control capability for controlling wireless communications with the customer stations using the Ethernet frame shown in FIG. 3. They conduct communications control using the MAC address included in the frame as the address of a specific communication terminal device, control communications within customer station groups according to the VLAN-Tag included in the frame, and control the handling of transmission data included in the IP frame”

c. after the broadband access server receiving the message transferred in step b, implementing user identification according to the tag having been inserted into the message and performing associated processing, (each base station has tables correlating the station-specific identifier information and the group identification information and stores the same group identification information (VLAN-Tag) for customer stations belonging to the same group, see fig. 2).

With regards to claim 6, Yokoyama describes in step a, *the tag set for the broadband access device is a VLAN Path Identifier (VlanPI) tag,*[0043] *the tag set for non-cascading access port in the broadband access device is a VLAN Channel Identifier (VlanCI) tag, [0044],said message is an Ethernet message, (Ethernet frame shown in FIG. 3).*

Regarding claim 2, Yokoyama describes *the insertion in step b comprises: the broadband access device independently inserting the tag set in step a into the received message,([0043]: “The BSEs of the base stations #1 and #2 are provided with communications control capability for*

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controlling wireless communications with the customer stations using the Ethernet frame shown in FIG. 3.”)

Regarding claim 3, Yokoyama describes in step a, *the tag set for the broadband access device is a VLAN Path Identifier (VlanPI) tag*, [0043] *the tag set for non-cascading access port in the broadband access device is a VLAN Channel Identifier (VlanCI) tag*, [0044], *said message is an Ethernet message*, (Ethernet frame shown in FIG. 3).

Regarding claim 7, Yokoyama describes *the fixed encapsulation format in step b comprises: sequentially encapsulating destination Media Access Control (MAC) address, source MAC address, type of Ethernet VlanPI tag, VlanPI, type of Ethernet VlanCI tag, VlanCI, type of data message, data being transmitted, and checking field*, (fig. 3). Yokoyama describes *sequentially encapsulating destination MAC address, source MAC address, VLAN- Tag, IP frame and FCS for the associated processing VLAN-Tag as shown in fig. 3*.

Regarding claim 8, Yokoyama describes in step b the broadband access device comprises: *an Ethernet switch*, (fig. 1 ATM-SW representing the Ethernet switch).

Regarding claim 9, Yokoyama describes *in step b is an IP DSLAM device composed of main control board, user interface board and backboard, the method of inserting the VlanPI and the VlanCI in step b further comprises the steps of:*

the user interface board inserting the VlanCI tag, [0044], *into the received Ethernet message*, (Ethernet frame shown in FIG. 3),

and the main control board inserting the VlanPI tag into the received Ethernet message, (note the exchange stores in the table, fig. 2, station-specific IDs (CPE-IDs: consumer premises

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equipment identifiers) assigned to the individual customer stations or tags (VLAN-Tags: virtual local area network tags) for customer station identification set in Ethernet frames in conformity with IEEE 802.1Q in association with virtual dedicated line network connection information (VPI/VCI: virtual path identifier/virtual channel identifier), responds to receipt of data from a customer station via a subordinate base station by, with reference to the table, converting identification information of the sending customer station attached to the data (CPE-ID or VLAN-Tag) to virtual dedicated line network connection information (VPI/VCI) and sending the data to another base station through the virtual dedicated line network, and responds to receipt of data through the virtual dedicated line network by, with reference to the table, converting the virtual dedicated line network connection information (VPI/VCI) of the data to customer station identification information (CPE-ID or VLAN-Tag) and sending the data to a subordinate base station (i.e., a customer station).

Regarding claim 10, Yokoyama describes in step c is a general user or a user with a private tag of internal network, (see fig. 2, CPE 4 with V-Tag 3 is a group user (also associated with a private tag as been a head office)

Regarding claim 11, Yokoyama describes *when the user with inserted tag is a user with private tag of internal network, in step b, the information of the private tag of internal network is encapsulated in the VlanCI tag*, (each base station has tables correlating the station-specific identifier information and the group identification information and stores the same group identification information (VLAN-Tag) for customer stations belonging to the same group, see fig. 2).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 4, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama, in view of Zhou et al. (US 2005/0091313 A1), hereinafter referred as Zhou.

Regarding claims 4 and 5, Yokoyama describes *the associated processing in step c comprises:*

c1. reforming the received message and deciding whether the message is a data message or a control message, and if it is a data message, executing step c2; if it is a control message, executing step c3; The base station #2, based on the VPI/VC1: 2 and its own MIB table 1, converts the received data to the associated VLAN-Tag: 2 and sends them to the CPE#6 and CPE#7 accommodated by the base station #2.

c2. removing the tag from the data message, checking binding relationship between the tag in the data message and the IP address of user, performing security checking, and transferring the qualified data message being checked; the MAC address included in the frame as the address of a specific communication terminal device, control communications within customer station groups according to the VLAN-Tag included in the frame, and control the handling of transmission data included in the IP frame,

c3. after implementing an authentication to the user, checking binding relationship between the user's account and physical access position according to the tag carried in the control message, performing user quantity control, and sending the tag, (note [0035]: The ATM trunk network N is connected with various servers of Internet service providers (ISP-A, ISP-B) and the like. It is also connected with a SNMP manager server M installed at an operation center that manages the subscriber wireless access system according to the present invention), the user account and password to an AAA server for processing authentication.

With regard to claim 5, Yokoyama describes in step a, *the tag set for the broadband access device is a VLAN Path Identifier (VlanPI) tag,[0043] the tag set for non-cascading access port in the broadband access device is a VLAN Channel Identifier (VlanCI) tag, [0044], said message is an Ethernet message, (Ethernet frame shown in FIG. 3).*

Yokoyama describes the associated processing except explicitly *performing user quantity control, sending the tag the user account and password to an AAA server for processing authentication.*

Zhou, in System and implementation method of controlled multicast, teaches (see fig. 5), access authentication of user (user have account and password), to an AAA server. The server is used to store configuration of user privilege as a way of controlling performance for joining in a multicast group. [0060]: The Ethernet switch (LAN Switch) classifies the vlan according to the ports, each of which connects with one user. Wherein port 1 links the multicast router, and the ports from 2 to 5 connect each host from 1 to 4 respectively. Once the authentication is successful, the multicast router will record the User ID of host 1 (i.e. host 1) and the corresponding vlan number (i.e. vlan 1) of host 1 (here, assume the user name in a user account of host 1 is host 1).

It would have been obvious to a person of ordinary skill at the time the invention was made to implement Yokoyama with the teaching of Zhou so as to utilize the User ID in the pane at right side of the AAA server for performing the user quantity control during the access authentication of the user for determining packets transmitted to group address.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMMANUEL MAGLO whose telephone number is

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(571)270-1854. The examiner can normally be reached on Monday - Thursday 7:00 - 4:30 and every other Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Emmanuel Maglo
Patent Examiner
January 10, 2009

/Hassan Kizou/
Supervisory Patent Examiner, Art Unit 2419